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Patent Office Canberra

I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2004901072 for a patent by AYZALA PTY LTD as filed on 03 March 2004.



WITNESS my hand this Eighteenth day of January 2005

LEANNE MYNOTT

MANAGER EXAMINATION SUPPORT
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AUSTRALIA

Patents Act 1990

PROVISIONAL SPECIFICATION

Invention Title: "A METHOD OF PRIORITISING A SAMPLE"

The invention is described in the following statement:

TITLE

"A METHOD OF PRIORITISING A SAMPLE"

FIELD OF THE INVENTION

This invention relates to a method of prioritising a sample. In particular, the invention relates to prioritising the testing of a biological sample obtained from a patient and therefore will be described in this context. However, it should be appreciated that the method may also be used to prioritise other samples such as those obtained from animals.

BACKGROUND OF THE INVENTION

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Specimen containers are used to collect, transport and process biological samples, such as blood, urine, faeces, infected material, tissue etc from patients for testing purposes. It should be appreciated that the term "specimen container" may include any form of container including tubes, buckets, cups or the like containers.

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The specimen containers usually have a label located on the specimen container that is applied during production of the specimen container so that details of the patient can be recorded. Once the biological samples are collected, they are then usually tested in a pathology laboratory to determine if the patient is unwell or suffering from a disease. Other samples may undergo different types of laboratory testing including cultivation and/or culture and/or nucleic acid testing.

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The normal process in obtaining a test result for a patient involves:

1. An experienced practitioner determining what test is necessary;

- 2. Collecting a sample using a specific specimen container based on the desired test;
- Recording the details of the person from whom the sample was collected and on whom the test is to be conducted on a label located on the specimen container;
- 4. Filling-in paperwork or an electronic request outlining the details of the test to be completed;
- Sending the specimen container and associated paperwork to the pathology laboratory;
- 10 6. The pathology laboratory receiving the specimen container and paperwork;
 - 7. The pathology laboratory conducting the tests outlined in the paperwork or electronic request; and
 - 8. Forwarding the results to the practitioner.

In many instances, it is necessary that the tests be conducted in an urgent or prioritised manner. In order that the tests are prioritised by the pathology laboratory, the practitioner normally indicates this urgency on the paperwork that accompanies the specimen container or on the electronic request associated with the specimen container.

To indicate that the test on the biological sample is urgent, many pathology laboratories use indicators that are placed on the specimen containers. These indicators are normally in the form of coloured stickers or markings that are located on the container. The stickers or markings are in various forms such as dots or stripes. Though these stickers or markings are

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largely effective, they are time consuming to apply and normally have to be specially manufactured to suit the specific containers.

Despite the use of such stickers or markers, there are frequent occasions when a prioritised test is not conducted on a biological sample within the time frame that it is required. This is normally due to the pathology laboratory overlooking the urgency indication on the paperwork or occasionally due to the paperwork not signifying that the test is urgent. It may also be due to the failure to apply the sticker, or the sticker being removed from the specimen container.

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This can be life threatening when tests are required to diagnose potentially fatal illnesses. It can also lead to significant delays in major public health scenarios such as disease outbreaks.

OBJECT OF THE INVENTION

It is an object of the invention to overcome or alleviate one or more of the above disadvantages or provide the consumer with a useful or commercial choice.

SUMMARY OF THE INVENTION

In one form, although not necessarily the only or broadest form, the invention resides in a method of prioritising a sample, the method comprising the steps of:

incorporating a prioritising indicator into a specimen container wherein the indicator is incorporated into the specimen container prior to a sample being located within the specimen container.

Preferably, the indicator is incorporated into the specimen

container during production of the specimen container.

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The indicator may be incorporated into a lid and/or body of the specimen container. Preferably, the indicator is located on the body adjacent an opening of the specimen container.

The indicator may extend around the lid and/or body of the specimen container.

The indicator may form part of a label that is applied to the specimen container. Alternatively, the indicator may be integral with the specimen container. Still alternatively, the indicator may be printed onto the specimen container.

The indicator may include a human readable element (for example words) and a machine readable element (for example a bar code) to indicate the priority and/or level of prioritisation of the sample and may include a grading system. Alternatively, different coloured indicators and/or different styles of indicators may be used to inform different levels or gradings of prioritisation

Preferably, the indicator is brightly coloured and/or sized so that it is visible from a distance.

The indicator may also include a human readable and/or a machine readable element (for example a bar code) specifying the urgency of the sample/specimen.

In another form, the invention resides in a label for a specimen container, the label comprising:

a details section to allow for the recordal of the details of a

patient on the specimen container; and

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an indicator band for indicating a priority for the specimen container, the band joined to the details section;

wherein the band is wider than the details section.

The indicator band may include a human readable element (for example words) and a machine readable element (for example a bar code) to indicate the priority and/or level of prioritisation of the sample and may include a grading system. Alternatively, different coloured indicators and/or different styles of indicators may be used to inform different levels or gradings of prioritisation.

The details section may include a location for the surname, first name, date of birth, time, signature, ward, patient number or similar details.

The details section may also include a fill line, that when applied to a body of the specimen container, indicates the level of fluid that the body is to be filled to.

The details section may also include a location for the sample type.

The details section may also include a batch number and/or expiry details and/or date of manufacture of the container.

The details section may also include a biohazard and/or radiation marker or symbol and/or some other hazard or warning symbol

The details section may also include a human readable and machine readable element (for example a bar code) specifying a laboratory or sample number that may also have a removable and adherent portion of

the same human readable and machine readable element (for example a bar code number).

The details section may also include a human readable and a machine readable element (for example a bar code) specifying the urgency/priority and/or level of prioritisation of the sample and may include a grading system.

Preferably, the indicator band is brightly coloured and/or sized so that it is visible from a distance.

DETAILED DESCRIPTION OF THE PREFFERED EMBODIMENT

10 Embodiments of the invention, by way of examples only, will be described with reference to the accompanying drawings in which:

FIGS. 1A to 1E show different embodiments of prioritising indicators that have been applied to a specimen container;

FIG. 2A shows the label, in detail, that has been applied to the specimen container of FIG. 1E; and

FIG. 2B shows a further embodiment of the label of FIG. 1E;

FIG. 2C shows another further embodiment of the label of FIG

1E.

and

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FIG. 3A shows yet another embodiment of the invention;

FIG. 3B shows yet another further embodiment of the invention;

FIG. 4 shows still yet another embodiment of the invention.

DETAILED DESCRIPTION OF PREFFERED EMBODIMENT

FIGS. 1A to 1E show specimen containers 10 that are typically

used for the collection of blood. Each specimen container has a lid 11 and a body 12. The body 12 contains the blood sample whilst the lid 11 is removable from the container and seals an opening contained within the body 12 through which the blood enters the body 12.

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Each specimen container 10 also has a label 13 located on the container. The label 13 is a sticker that is applied to the specimen container during manufacture i.e., in production. The label 13 is sized so that it only extends partially around the body 12 so that a view window is left on the container to view the level of blood within the body 12.

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The label 13 has a details section that includes discrete labelled zones for surname, first name, date of birth, time that the sample was taken, signature of the person who took the same, the ward number, and patient number. However, it should be appreciated that the details label may be varied according to specific requirements.

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The label also includes a fill line that indicates the level of fluid that the body is to be filled to. The fill line must be precisely located with respect to the body and hence a major reason why the label is applied to the body during manufacture.

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FIG. 1A shows the specimen container with a label 13. A prioritising indicator 14 is located above this label on the body 12 of the specimen container 10. In this embodiment, the prioritising indicator 14 is in the form of band that extends the circumference of the body. The band is fluorescent and hence can be readily identified by a person.

FIG. 1B shows a very similar prioritising indicator 14 to that

shown in FIG. 1A. In this embodiment, the prioritising indicator 14 is printed onto the body 12 and is in the form of a dotted band that extends around the circumference of the body 12.

FIG. 1C shows a prioritising indicator 14 located on the lid 11 of the specimen container 10. The indicator 14 is in the form of a band of dots that extend around the circumference of the lid 11.

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FIG. 1D shows a prioritising indicator 14 located on the lid 11 and the body 12 of the container 10. The prioritising indicator is in the form of two bands of triangles that extend around the lid 11 and the body 12 of the container 10.

FIG. 1E shows a prioritising indicator 14 that is integrally formed with the label. The label includes a details section and the prioritising indicator in the form of an indicator band 14

FIG. 2A shows the label prior to it being placed on the body of the specimen container. As can be seen, the details section 16 carries the standard elements of a standard label as described above.

The indicator band 14 is substantially wider than the details section. The indicator band extends entirely around the body whilst the details section 16 only extends partially around the body 12. This allows a window to view the sample as outlined above.

In this embodiment, the details section 16 is located adjacent one end of the indicator band 14.

FIG. 2B shows that the details section 16 can be located in the adjacent middle of the indicator band.

FIG. 2C shows the details section with some modifications such as the name and colour code of the anticoagulant/preservative, batch number and expiry date.

FIGS. 3A and 3B shows further embodiments of a label 13 similar to that shown in FIG. 2A. An indicator band 14 and details section 16 are integrally formed as in the previous embodiments. However, the label 13 shown in FIG. 3 has a machine readable tag 17 located on the label 13. The machine readable tag 17 incorporates the prioritisation indicator information into the machine readable tag 17 so that when the machine readable tag 17 is scanned, the prioritisation information of the indicator is electronically transferred to laboratory instruments, the laboratory information system and/or other appropriate electronic devices.

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FIG. 4 shows yet another embodiment of a label 13. This label 13 has an indicator band14 that includes a human readable element and a machine readable tag 17 integrally formed with the indicator band. Again, the prioritisation information of the label is incorporated into the machine readable tag 17 so that when the machine readable tag is scanned, the prioritisation information of the label is electronically transferred to laboratory instruments, the laboratory information system and/or other appropriate electronic devices.

It should be appreciated that by incorporating the prioritising indicator into the specimen container during production, this will automate the process making the container for urgent samples cheaper to produce. Further, existing machinery, such as the label applicators, can be simply

modified to place the label with the integrated indicator band onto the body of the container.

Further, the utilisation of specimen containers with incorporated prioritisation indicators will, by easy visual and electronic identification of urgent samples from a distance to all people and systems handling the specimen containers, assist in expediting the testing process from sample collection through sample transportation, sample receipt in the laboratory, laboratory testing, result validation/verification, report production, report delivery and sample storage through to sample disposal.

Further, the utilisation of specimen containers with incorporated prioritisation indicators will eliminate the risk of failure to recognize a high priority sample and/or the separately applied priority indicator becoming dislodged or removed.

Further, the utilisation of specimen containers with incorporated prioritisation indicators will expedite the testing process when no accompanying paperwork has been received or if requested tests are ordered electronically.

It should also be appreciated that various other changes and modifications may be made without departing from the spirit or scope of the invention.

DATED this Third day of March 2004.

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AYZALA PTY LTD
by its Patent Attorneys
FISHER ADAMS KELLY

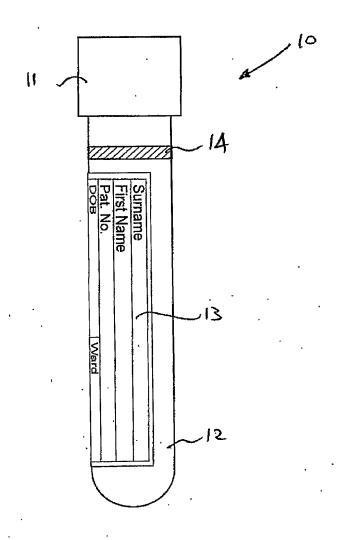


FIG. 1A

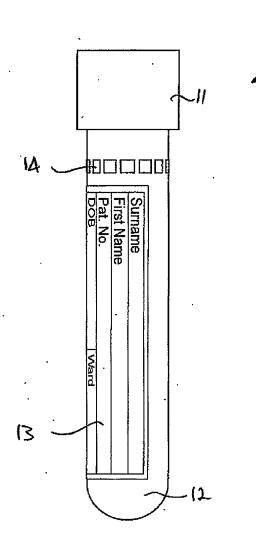


FIG. 1B

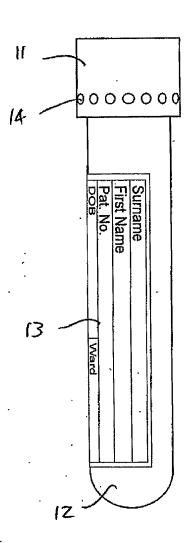


FIG. 1C

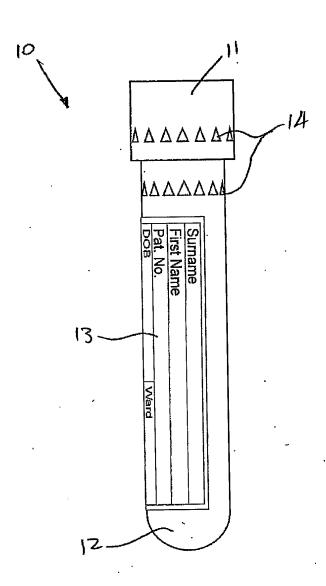


FIG. 1D.

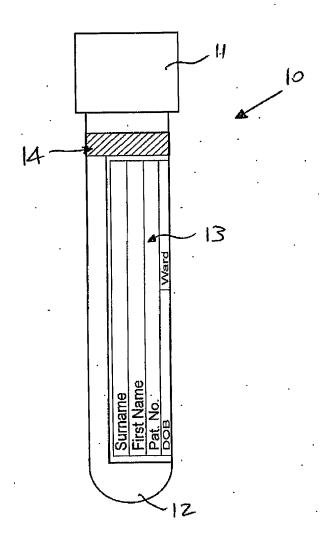


FIG. 1E

F16 24

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Patient Name	Date of Birth	
Patient Number	Signature of Collector	la Pty Ltd 2003
Date of Collection	Time of Collection	©:Ayzala Pts
Ward/Clinic	Doctor	0
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Patient Name	Date of Birth	
Patient Number	Signature of Collector	Ltd 2003
Date of Collection	Time of Collection	© Ayzala Pty Ltd 2003
Ward/Clinic	Doctor	©

Patient Name Dake of Birth

Patient Number Signature of Collector

Dato of Collection Time of Collection

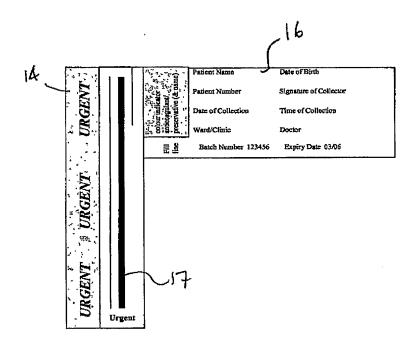
Ward/Clinic Doctor

Batch Number 123456 Expiry Date 03/06

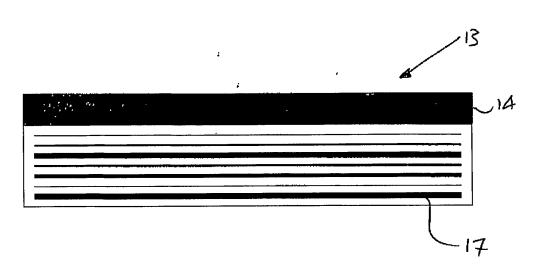
F16 2C

Urgent Urgent Urgent Colour indicator anticoagulant/ preservative (& name) Fill Line Patient Number Date of Collection Ward/Clinic © Ayzala Pty Ltd 2003 Doctor Expiry Date 03/06 Signature of Collector Date of Birth Time of Collection





F16 3B



F16 4